

Mr. President, also incorporated into the bill is language requiring the Secretary to fund research on the competitiveness and viability of small- and medium-size farms under the Initiative for Future Agriculture and Food Systems—a new research program authorized by S. 1150 and funded at a total of \$600 million for fiscal years 1999 through 2002. With the inclusion of my amendment, the Secretary is directed to make grants for research projects addressing the viability of small- and medium-size farming operations with funding made available under the Initiative in fiscal years 1999–2002. This amendment ensures that the research needs of small dairy, livestock, and cropping operations will be addressed under the substantial new funding provided for agricultural research in this bill.

Finally, Mr. President, the conference committee also accepted important language regarding precision agriculture. Precision agriculture is a system of farming that uses very site-specific information on soil nutrient needs and presence of plant pests, often gathered using advanced technologies such as global positioning systems, high performance image processing, and software systems to determine the specific fertilizer, pesticide and other input needs of a farmer's cropland. This technology may have the benefit of lowering farm production costs and increase profitability by helping the producer reduce agricultural inputs by applying them only where needed. In addition, reducing agricultural inputs may minimize the impact of crop production on wildlife and the environment. While precision agriculture, generally defined, encompasses a broad range of techniques from high-technology satellite imaging systems to manual soil sampling, it is most frequently discussed in terms of the use of capital intensive advanced technologies.

Precision agriculture may result in production efficiencies and improved profitability for some farms, yet many in agriculture are concerned that, because of the capital intensive nature of precision agriculture systems, this new technology will not be applicable or accessible to small or highly diversified farms. It is unclear whether precision agriculture services, even if provided by input suppliers, will be available at affordable rates to small farms. Furthermore, some observers are concerned that private firms may find that marketing efforts directed at small farms are not lucrative enough and thus may avoid efforts to apply the technology to small operations.

In addition to concerns about the applicability and accessibility of precision agriculture to small farms, many are concerned that precision agriculture may not be the most appropriate production system for small farms given the costs of acquiring new technology or contracting for additional services. There may be other

production systems, such as integrated whole farm crop, livestock, and resource management systems, that allow small farmers to reduce input costs, improve profitability, and minimize environmental impacts of agricultural production that are more appropriate for smaller operations.

To address this concern, accepted language allows USDA to fund studies evaluating whether precision agriculture technologies are applicable or accessible to small- and medium-sized farms. The amendment also allows USDA to conduct research on methods to improve the applicability of precision agriculture to these operations. It is critical that USDA's research investment in this new technology not exclude the needs of small farmers. If it does, this new research program could ultimately affect the structure of agriculture, potentially providing disproportionate advantages to large scale farming operations, accelerating the trend to fewer and larger farms. My amendment will allow USDA to conduct research on low cost precision agriculture systems that do not require significant financial investments by farmers and that may be more appropriate to small or highly diversified farming operations.

Mr. President, I appreciate the cooperation of the chairman, Mr. LUGAR, and the ranking member, Mr. HARKIN, of the Agriculture Committee and their staff in addressing the important research needs of small- and medium-size farms by maintaining these amendments during conference committee consideration of this bill.

These amendments will ensure that research money is directed at the interests of the small farmer providing the tools to make these operations viable to survive the riggers of farming in the next century.

SHANNEL QUARLES—KANSAS YOUTH OF THE YEAR

Mr. BROWNBACK. Mr. President, today, I rise to recognize an outstanding high school student from Wichita, KS. Shannel Quarles won the Kansas Youth of the Year award for 1998–1999. Along with this award, Shannel will receive a four-year scholarship to the college of her choice, sponsored by Oprah Winfrey's Angel Network.

Mr. President, I am proud to recognize the outstanding accomplishment of this high school sophomore. She is an exemplary role model for young people in our nation. I congratulate Shannel and her family and wish her continued success.

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Mr. Williams, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages

from the President of the United States submitting sundry nominations which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first and second time by unanimous consent, and referred as indicated:

By Mr. WARNER:

S. 2062. A bill to amend the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to clarify liability under that Act for certain recycling transactions; to the Committee on Environment and Public Works.

By Mr. HOLLINGS (by request):

S. 2063. A bill to authorize activities under the Federal railroad safety laws for fiscal years 1999 through 2002, and for other purposes; to the Committee on Commerce, Science, and Transportation.

By Ms. MIKULSKI (for herself, Mr.

GLENN, and Mr. SARBANES):

S. 2064. A bill to prohibit the sale of naval vessels and Maritime Administration vessels for purposes of scrapping abroad, to establish a demonstration program relating to the breaking up of such vessels in United States shipyards, and for other purposes; to the Committee on Armed Services.

By Mr. MURKOWSKI (for himself and Mr. STEVENS):

S. 2065. A bill to amend the Internal Revenue Code of 1986 to clarify the tax treatment of Settlement Trusts established pursuant to the Alaska Native Claims Settlement Act; to the Committee on Finance.

By Mr. CHAFEE:

S. 2066. A bill to reduce exposure to environmental tobacco smoke; to the Committee on Environment and Public Works.

By Mr. ASHCROFT (for himself, Mr. LEAHY, Mr. BURNS, Mr. CRAIG, Mrs. BOXER, Mr. FAIRCLOTH, Mr. WYDEN, Mr. KEMPTHORNE, Mrs. MURRAY, and Mrs. HUTCHISON):

S. 2067. A bill to protect the privacy and constitutional rights of Americans, to establish standards and procedures regarding law enforcement access to decryption assistance for encrypted communications and stored electronic information, to affirm the rights of Americans to use and sell encryption products, and for other purposes; to the Committee on the Judiciary.

By Mr. THOMPSON (for himself and Mr. GLENN):

S. 2068. A bill to clarify the application of the Unfunded Mandates Reform Act of 1995, and for other purposes; to the Committee on the Budget and the Committee on Governmental Affairs, jointly, pursuant to the order of August 4, 1977, with instructions that if one Committee reports, the other Committee have thirty days to report or be discharged.

By Mr. DORGAN (for himself and Mr. CONRAD):

S. 2069. A bill to permit the leasing of mineral rights, in any case in which the Indian owners of an allotment that is located within the boundaries of the Fort Berthold Indian Reservation and held in trust by the United States have executed leases to more than 50 percent of the mineral estate of that allotment; to the Committee on Indian Affairs.

By Mr. DEWINE:

S. 2070. A bill to provide for an Underground Railroad Educational and Cultural